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ABSTRACT

The extensive use of clausal embedding in legal language is examined. The extent and depth of left-branching, nested, and right- branching clauses in the 1972 British Road Traffic Act are also studied. The complexity of the resulting constructions, and the problems created for comprehension are described. The analysis reveals complex sequences of embedding in all positions and instances of complex-compound sentences, consisting of more than one principal clause, each having embedded clauses in one, two, or all three fields. While clausal embedding may be an economical way of loading a sentence with information, it may also serve as a potential source of complexity and even confusion. (MSE)

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SOME COMPLEX TYPES OF EMBEDDING IN LEGAL ENGLISH

Introduction

For some time now, I have been working on the structure of English legal texts, especially in terms of finding out the features that set it apart from other registers. I started with an analysis of the syntax of legal discourse, and in this paper I shall discuss one detail of this analysis, viz. the extensive use of clausal embedding, which is definitely one of the style-markers of the legal genre.[1]

Since the early years of transformational-generative grammar, embedding (i.e. the use of subordinate clauses within one sentence) has been an important topic in the description of linguistic systems. In consequence of the generativist assertions pertaining to the psychological reality of the theory, embedding came to be one of the central objects of testing also in psycholinguistic research. Of this work, Charrow (in Felker 1980:14-16) provides a succinct summary, which serves as the basis for the following brief survey.

One of the early studies seeking to demonstrate how certain types of embedding hamper understanding is Yngve's article "A model and an hypothesis for language structure" (1960). According to Yngve, the greater the "sentence depth" (i.e. the greater the number of embedded clauses), the harder the sentence is to understand and produce, because it places a greater load on short-term memory. It has been discovered afterwards, however, that the matter is not quite so simple. Subsequent testing of the depth hypothesis has produced mixed results, and the whole idea of using memory techniques to measure syntactic difficulty has, in fact, been cast into doubt. Instead, it has been suggested that memory for sentences has a semantic, rather than syntactic, basis. According to Charrow (p. 15), "there

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apparently are confounding semantic, pragmatic, and performance factors that make the real-world situation much more complex than the earlier studies suggested." This is, I think, a correct conclusion, but it is equally true that there are some types of embedding, such as the so-called self-embedding constructions of the type The boy (whom the girl [whom the man in the red car hit] kissed) lives next door to me (quoted from Charrow & Charrow 1979:1328), which are difficult to process almost regardless of their semantics and pragmatics. One indication of this is the fact that such constructions are hardly ever used in speech.

In this context I am not going to say more about problems of comprehension, except that they certainly exist in the material that I am about to discuss. My purpose is to analyse embedding (which I use synonymously with subordination) in a genre which uses it more than probably any other register in English, viz. the language of the law, placing the emphasis on the structural complexities created by this syntactic device.

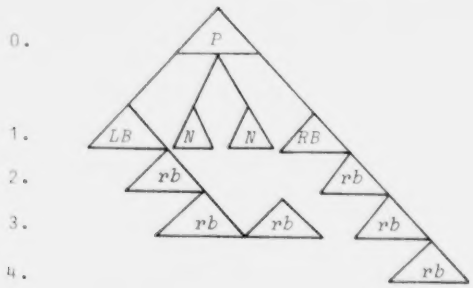
1. The patterns of embedding

To get an idea of what is meant by 'embedding', 'field of embedding' and 'depth of embedding', let us look at example (1). If we take the (underlined) principal clause (= P) in (1) as the starting-point, we find embedded clauses before it, in the middle of it, and after it. Following the terminology of transformational grammar, these clauses may be called 'left-branching' (LB), 'nested' (N) and 'right-branching' (RB), respectively. If we, further, consider both finite and non-finite dependent clauses[2], and take the principal clause (P) to represent zero level, the maximum depth of embedding is 3 in LB, 1 in N, and 4 in RB, as shown by the simplified structural description (1a).

The information in brackets after each clause indicates the relevant field and level of embedding. The capital letters refer to the position of the embedded clause in the principal clause, while the lower case ones specify the position in terms of the clause immediately above.

1. For the purpose of spreading the work of (*LB,1*) / issuing certificates in contemplation of a change in the length of the period (*rb,2*) / specified under subsection (5) above or of the appropriate period (*rb,3*) / (and whether for purposes of this section or section 52 of this Act) (*rb,3*) / the order or, / as the case may be (*N,1*) / regulations / changing the length of that period (*N,1*) / may be made so (=*P*) / as to come into operation on different days (*RB,1*) / as respects vehicles (*rb,2*) / first registered under any of the enactments (*rb,3*) / mentioned in subsection (2) above at different times. (*rb,4*)-Part II. 44(8).

1a.



Most people would, I think, agree that (1) is a difficult sentence to grasp fully at one reading. Yet, it is not particularly complex in terms of what can be found in the language of the law. But it is complex enough to illustrate some central features of embedding, e.g. that embedded clauses may be finite or non-finite, they may occur in any of the three fields, and that they may extend to relatively deep levels, especially in LB and RB. Interesting as all these aspects are, I shall leave them aside in this discussion, and concentrate on the internal structure of LB, N and RB. I shall do this by describing what I found out about this aspect of the problem in a corpus consisting of 373 sentences from the (British) Road Traffic Act 1972. These sentences contained 564 principal clauses (with only 24 simple sentences), 917 finite embeddings and 1036 non-finite ones. Of the embedded clauses, 714 occur on the first level of subordination. The first level is important in the sense that it determines whether the principal pattern of embedding is LB, N, or RB. Taking this analysis as the starting point, we get four structural alternatives. Their frequencies

are given in Table 1. The first group ('single') indicates that there is only one embedded clause involved, while in groups (2)-(4) the embedded sequence is a complex one. The symbol X stands for a first-level clause, whether LB, N, or RB, according to the relevant column, and the index (n) for any number of them. The percentages are given by row (→) and column (↓).

Table 1. The structure of LB, N and RB

Type	LB			N			RB			Total	
	No.	% →	% ↓	No.	% →	% ↓	No.	% →	% ↓	No.	% ↓
1. Single	36	10.5	36	117	34.1	62.2	190	55.4	44.6	343	48.0
2. X + rb_n	38	14	38	57	21	30.3	177	65	41.5	272	38.1
3. X + n_n	1	12.5	1	6	75	3.2	1	12.5	0.2	8	1.1
4. X + $\left\{\begin{matrix} rb + n \\ n + rb \end{matrix}\right\}_n$	25	27.5	25	8	8.8	4.3	58	63.7	13.6	91	12.7
Total	100	14	100	188	26.3	100	426	59.7	100	714	100

According to these results, single embeddings constitute about half of the occurrences. Those where the subordinate clauses follow the clause immediately above them (i.e. Type 2), are also common. In contrast, Types (3) and (4), representing the most complex variants, are a minority, though an important one. In (3), there are nested embeddings inserted into the first-level clause, while in (4), the pattern consists of a combination of rb and n (in whichever order). It is mainly these most complex types that we are concerned with now.[3]

1.1. Left-branching

Let us take the three fields in turn, and look first at LB. In Types (1) and (2), when LB (i.e. ◁ and ◁◁), only one subtype is worth mentioning, because it may create a problem for comprehension, viz. the construction where two dependent clauses are co-ordinated asyndetically, as the if and having clauses in the following:

2. If a person drives a motor vehicle on a road recklessly, or at a speed or in a manner (*LB,1*) / which is dangerous to the public, (*rb,2*) / having regard to all the circumstances of the case, (*LB,1*) / including the nature, condition and use of the road, and the amount of traffic (*rb,2*) / which is actually at the time, (*rb,3*) / or which might reasonably be expected to be, on the road, (*rb,3*) / he shall be guilty of an offence. (=*P*)-Part I. 8(4).

A more important point to observe is the fact that there appear to be no examples where a first-level LB, N or RB clause would have an lb clause following (i.e. * , * , or *).[4]

In contrast with the asyndetic type, which has a low insidence, clauses introduced by a conjunction are extremely common, and occur at all levels of embedding, especially in LB and RB. At the beginning of the sentence they often significantly increase the length of the LB-sequence. The longest LB in the material contained 14 clauses. On the average, there are more than two clauses in this position (mean 2.3/P).

Since Type (3) is almost non-existent in LB, Type (4) - involving both n and rb clauses below the first-level LB clause - remains the most complicated structurally. The nested clause is commonly at the second level in such examples, e.g.

3. If, / while a motor vehicle is on a road or on a parking place (*n,2*) / provided by the local authority, (*rb,3*) / a person otherwise than with lawful authority or reasonable cause gets on to the vehicle (*LB,1*) / or tampers with the brake or other part of its mechanism, (*LB,1*) / he shall be guilty of an offence. (=*P*)-Part I. 29.

But there are also instances where the nested insertion comes later in the LB-sequence, e.g.

4. If it appears to a constable in consequence of a breath test (*LB,1*) / carried out by him on any person under subsection (1) or (2) above (*rb,2*) / that the device / by means of which the test is carried out (*n,4*) / indicates (*rb,3*) / that the proportion of alcohol in that person's blood exceeds the prescribed limit, (*rb,4*) / the constable may arrest that person without warrant (=*P*) / except while that person is at a hospital as a patient. (*RB,1*)-Part I. 8(4).

The instances where more than one nested clause is involved, represent a yet more complex variation, e.g.

5. If any person at any time on or after the day / appointed by regulations (*n,2*) / made by the Secretary of State in relation to goods vehicles of a prescribed class, (*rb,3*) / being vehicles (*rb,4*) / to which type approval requirements / prescribed by those regulations (*n,6*) / apply, (*rb,5*) / uses on a road, or causes or permits (*LB,1*) / to be so used, a goods vehicle of that class (*rb,2*) / and it does not appear from one or more certificates then in force under section 47 of this Act (*LB,1*) / that the vehicle complies with those requirements, (*rb,2*) / he shall be guilty of an offence. (=*P*)-Part I. 51(1).

Here the nested sequence consists of five clauses, three of which are rb with regard to the preceding nested clause.

Summing up the properties of LB, we may say that it constitutes an important position, where a lot of information can be squeezed in a syntactically economic way (usually in the form of conditions, provisos, and the like). At the same time, however, excessive crowding of the initial position constitutes a source of complexity, especially when the LB-sequence is very long, and when nested clauses are inserted in it.

1.2. Nesting

When we come to nesting, we find that Type (3) is, according to Table 1, less common throughout than might be expected. Most of the instances (N=6) involve self-embedding of the type exemplified by (6).

6. A person / who, / when riding a cycle, / not being a motor vehicle, (*n,3*) / on a road or other public place, (*n,2*) / is unfit to ride through drink or drugs (*N,1*) / shall be guilty of an offence. (*P*)-Part I. 19(1).

In the self-embedding type the depth value does not exceed 3; normally it is 2. In Type (4) - with a combination of nested and right-branching clauses - the depth value can be as much as 4 in the present corpus. Example (7), involving a long N-sequence, illustrates this type:

7. Any person / who, / without being authorized by the competent authority (*n,2*) / to apply any approval mark, (*rb,3*) / applies that mark or a mark (*N,1*) / so nearly resembling it (*rb,2*) / as to be calculated to deceive (*rb,3*) / shall be guilty under the Trade Descriptions Act 1968 (=*P*) / whether or not he would be guilty of such an offence apart from this subsection. (*RB,1*)-Part I. 63(2).

The clauses of Type (2), involving N+rb, extend deepest in the nested field (level 5) in the corpus. The mean maximum depth of embedding of this type is 2.2 clauses per principal clause. Taking all the clauses in the medial field into account, however, the mean maximum depth of embedding is 1.8/P, i.e. there are approximately two clauses inserted in this position.

Summing up the features of nesting, it can be said that excessive complexity is avoided in this position.[5] The likely reason for this is the fact that the limits of perceptual capacity are narrower there than in LB or RB. One indication of this is the lower mean depth value in the medial position.

1.3. Right-branching

Finally, we shall look at RB clauses, which are more straightforward. We know by now (on the basis of Table 1) that they are the most common type of the three. Their mean depth value is also greater (3.1/P) than that of LB or N. Successive RB is a common type, e.g.

8. Subject to provisions of this section it shall not be lawful (=P) / to alter a motor vehicle or trailer so (*RB,1*) / as to render its condition such (*rb,2*) / that the use thereof on a road in that condition would be unlawful (*rb,3*) / by virtue of any provision made (*rb,4*) / as respects the construction, weight or equipment of vehicles by regulations under the said section 40. (*rb,5*)-Part. I. 60(2).

On the other hand, also the share of Type (4) - involving a combination of rb and n clauses - is greater in the terminal field than in either LB or N. However, there is an important difference in that only one nested clause normally intervenes in such cases. The examples represented by (9) are thus a minority, because they contain more than one nested clause.

9. The Secretary of State may by regulations require (=P) / that prescribed alterations in any of the relevant aspects of design, construction or marking or any other such aspect / which affects the plated weight (*n,2*) / made to any vehicle (*rb,3*) / for which a manufacturer's certificate or a Minister's approval certificate is issued (*rb,4*) / shall, / subject to any exemption (*n,2*) / granted under subsection (3) below, (*rb,3*) / be notified to the Secretary of State. (*RB,1*)-Part I. 48(2).

On the whole, nesting is qualitatively speaking not so significant in RB as it is in LB and N itself. In fact, there are only a couple of examples involving more than one nested clause within RB in the corpus, in addition to (9). This limited use of nesting is explained by the fact that there is really no need to condense the message in the final field, because the open-ended device of right-branching is freely available to be extended almost at will. In contrast, there is a need to condense the message in the fields of LB and N, which is dictated by perceptual limitations, and this is why we find complex nesting more frequently there than in RB.

Conclusion

In this paper I have attempted to illustrate the use of embedding in a genre that exploits the device to the full. I have done this by showing how it functions, on the one hand, as an economic way of loading a sentence with information - and as a potential source of complexity and even confusion, on the other. When considering the aspect of complexity, however, it should also be remembered that not only do we find embeddings of the type exemplified in this paper one at a time - on the contrary, there are frequently complex sequences of embedding in all positions, LB, N and RB. Moreover, the sentence may itself be of the complex-compound type, i.e. consist of more than one principal clause, each of them having embedded clauses in one, two, or all three fields of embedding. I shall finish off by quoting one such example.

10. In any proceedings for an office under section 5 of this Act, the court shall, / subject to section 10(5) thereof, *(N,1)* / have regard to any evidence *(=P)* / which may be given to the proportion or quantity of alcohol or of any drug *(RB,1)* / which was contained in the blood or present in the body of the accused *(rb,2)* / as ascertained by analysis of a specimen of blood *(rb,3)* / taken from him with his consent by a medical practioner *(rb,4)* / or of urine provided by him, at any material time; *(rb,4)* / and / if it is proved *(LB,1)* / that the accused, / when so requested by a constable at any such time, *(n,3)* / refused *(rb,2)* / to consent to the taking of *(rb,3)* / or to provide a specimen for the analysis, *(rb,3)* / his refusal may, / unless reasonable cause therefore is shown, *(N,1)* / be treated *(=P)* /

as supporting any evidence (*RB*,*1*) / given on behalf of the prosecution, (*rb*,*2*) / or as rebutting any evidence (*RB*,*1*) / given on behalf of the defence, with respect to his condition at that time. (*rb*,*2*)-Part I. 7(1).

NOTES

1. A more detailed analysis of embedding in legal English will appear in a forthcoming article of mine. The purpose of the present discussion, concentrating on the most complex variants, is to supplement that analysis.

2. For a definition of finite and non-finite clauses, see Quirk et al. (1972:722-27). The distinction is based on the form of the verb. The group of non-finite embeddings contains a few verbless clauses of type while at a hospital, but the constructions where the non-expression of the verb is due to co-ordination have not been analysed as separate (verbless) clauses. Thus, in principle a finite clause has a finite verb, and a non-finite one a non-finite verb.

3. Note that Table 1 gives, in a way, a misleading picture of the frequency of dependent clauses in the text, because it only contains the types of embedding, and the numbers are, therefore, those of the clauses found on the first level of embedding. In particular, it should be noted that Types (2) and (4) frequently consist of more than two clauses, which may be subordinate to, or co-ordinated with, each other, or both.

4. This is perhaps not surprising. According to Quirk et al. (1972:793), no subordinate clause can itself be the first element of another subordinate clause, but must at least be preceded by a subordinator.

5. I have not discussed all variations of nesting. One type that has been left out is where a main clause is embedded. Such examples are rare, however. In the following sentence the clause who he has reasonable clause to believe represents this type:

> If an accident occurs owing to the presence of a motor vehicle on a road or other public place, a constable in uniform may require any person who he has reasonable cause to believe was driving or attempting to drive the vehicle at the time of the accident to provide a specimen of breath for a breath test - (Part I. 8(2)).

REFERENCES

Charrow, R.P. and Charrow, V.R. 1979. "Making legal language understandable: a psycholinguistic study of jury instructions." Columbia Law Review 79:1306-74.

Felker, D.B. ed. 1980. Document design: a review of the relevant research. Washington D.C.: American Institutes for Research.

Hiltunen, R. Forthcoming. "The type and structure of clausal embedding in legal English." To appear in Text.

Quirk et al. = Quirk, R., Greenbaum, S., Leech, G., and Svartvik, J. 1972. A grammar of contemporary English. London: Longman.